

## **REMARKS**

### **Amendments to the Claims**

Claims 60, 86, and 87 have been amended to recite (c) rather than (d) to be consistent with claim 65.

Claim 102 has been added. Support for claim 102 is found in the Specification at page 6, line 6 (85% identity suppresses flowering), and page 54, line 5 (heterologous sequence expression).

Claim 103-105 have been added. Support for these claims is found in the Specification at page 7, lines 29 and page 8, lines 1-9.

No new matter has been added.

### **Interview**

Applicants thank Examiner Baum for speaking with their representative on Friday, December 19, 2008. Applicants' representative called Examiner Baum to clarify whether he would enter an amendment which possibly included submission of laboratory notebook pages to overcome the Jensen reference and a new claim. The Examiner said that it was likely that such an amendment would not be entered after-final because it would raise sufficient issues that require new consideration.

### **Indefiniteness**

The Examiner rejects claims 66, 68-80, and 86-101 because claim 66, 86, and 87 recite the limitation "(d)" rather than "(c)". Applicants have amended the claims to be consistent with claim 65, thereby obviating the Examiner's rejection. Applicants request that the rejection be withdrawn.

### **Claim Objections**

The Examiner objects to claims 86-88 and 100-101 as being in improper multiple-dependent form “because a multiple dependent claim must state the claims from which it is dependent in the alternative.”

Applicants submit that the Examiner has misinterpreted the claims. Claims 86-88 and 100-101 simply recite the portion of step (c) in the claims. Thus, in light of their base claim, claims 86-88 and 100-101 are clear.

### **Written Description**

The Examiner rejects claims 65-66, 68-80, 86, and 88-100 as lacking sufficient written description. Applicants note that claim 87, having 100% sequence identity to either SEQ ID NO: 1 or SEQ ID NO: 2 has not been rejected.

The Specification highlights that the presence of the motif YESP(K/R), and in particular its serine residue, believed to be important for the superior flowering repressor activity of the LpTFL-1. (See Specification page 12, paragraph 2). Thus, one skilled in the art would understand that the inventors were in possession of a method of reducing or preventing flowering in a plant since the function of the LpTFL-1 protein is disclosed in the present application.

Claims 88 and 94 are directed to method plants belonging to the grass family of Poaceae. The experimental data in the application obtained for two grass species (i.e. perennial ryegrass and red fescue) supports the claimed subject-matter because grass plants of this family are known for their similarity in physiology and regulation of growth. The development of the flowering organs are particularly well known for their interspecies similarity. Thus, a skilled person reading the specification would immediately envisage that the inventors were in possession of a method of reducing or preventing flowering in a plant of the Poaceae family.

Applicants also point to new claim 102 which claims a transformant comprising the SEQ ID NO: 1 or SEQ ID NO: 2. Applicants submit that one of skill in the art would have understood that Applicants were in possession of such a transformant at the time of filing.

The Examiner requests that Applicants provide the accession numbers of the sequences listed in the Table filed with the Amendment dated May 1, 2008 in an IDS. Applicants herein provide those accession numbers.

Applicants request that, the Examiner consider the Declaration filed with the Amendment dated May 1, 2008.

### **Enablement**

The Examiner rejects claims 65-66, 68-80, 86, and 88-101 as not enabled. The Examiner states that “Applicants do not disclose other polynucleotides falling within the scope of the claimed invention which produces the same result as SEQ ID NO: 1 or 2 or polynucleotides encoding SEQ ID NO: 3. *Applicants have not taught which amino acids are essential and which amino acids can be changed such that when said protein is expressed in a plant, it produces a delayed flowering phenotype.* . . . [G]iven Applicants’ statement that not all members of the PEBP gene family have the same activity in relation to floral control . . . and given the lack of explicit definition of LpTFL1-like activity, the fact pattern of the instant case and the fact pattern from *Ex Parte [Kubin]* are not congruent.” (Internal quotes and citations omitted).

First, Applicants submit that the Specification explicitly defines LpTFL1-like activity on page 4, lines 9-13. (“Overexpression of LpTFL-1 in *Arabidopsis*, red fescue, and ryegrass results in a dramatic extension of the vegetative-inflorescence phase and a lateral branching in *Arabidopsis* that is consequently more extreme compared with overexpression of TFL1 in *Arabidopsis*. In addition, the results illustrate that LpTFL1 is capable of repressing flowering in perennial plants

in the first year of growth and also in subsequent years.”). Thus, Applicants submit that disclosure in the Specification disproves one prong of the Examiner’s rationale for lack of enablement. Applicants request that the rejection be withdrawn.

Second, the Examiner states that “Applicants contend that the Specification discloses eleven amino acid residues which are essential for a functional protein” but disregards the disclosure in the Specification on page 12, lines 5-9, describing the eleven *essential* amino acids in plant PEBP sequences, and discussing how LpTFL1 relates to those sequences, and how the superior repressor activity of flowering is obtained. The Examiner is not free to disregard the teachings of the Specification. Yet, in dismissing these teachings from the Specification, the Examiner does not address why those eleven *essential* amino acids do not provide sufficient disclosure for one of skill in the art to be able to make and use the claimed invention without undue experimentation.

Thus, Applicants’ assertion that, like *Ex Parte Kubin*, 83 USPQ2d 1410, 1410 (Bd. Pat. App. & Int. 2007), the Specification discloses “how to: 1) make variants of the SEQ ID NOs . . . 2) calculate the percent identity between the SEQ ID NOs . . . and the variant sequence; and 3) test the variant sequence” for functionality is a valid application of *binding* case law. Therefore, Applicants submit that *Ex parte Kubin* is on point, and that the Examiner is required to adhere to the dictates of *Kubin*.

Applicants request that the rejection be withdrawn.

### **Novelty**

The Examiner rejects claims 65, 66, 71, 73, 75-76, 79, 79, and 87 are rejected as anticipated by Jensen et al. under 35 U.S.C. §102(a).

Applicants submit that Jensen is disclosing Applicants’ own work. Specifically, Jensen discloses that a version of this paper was submitted for review on December 8, 200, returned for revision

December 18, 2000, and ultimately accepted December 22, 2000. (Jensen, 1527, col. 2, lines 32-33). Applicants request that it be withdrawn.

### **Obviousness**

Applicants submit that since Jensen is Applicants' own work, Jensen is unavailable as prior art. Consequently, Applicants request that the Examiner withdraw the obviousness rejection.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

**CONCLUSION**

In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Leonard R. Svensson Reg. No. 30,330 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: December 22, 2008

Respectfully submitted,

Attachments: Table of Accession Numbers

By 

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